

ABSTRACT OF THE DISCLOSURE

This invention relates to an apparatus and method of using a high frequency, high power, fluid dielectric variable capacitor for an impedance matching network. The apparatus consists of a bow-tie rotary vane, a set of two fixed vanes, and a set of rotating vanes adapted to rotate interdigitally between the fixed vanes. A dielectric fluid is circulated between the fixed vanes and the rotating vanes for cooling the device. This arrangement facilitates production of a device having a higher capacitance and a smaller size, thus making it suitable for use in a matching network.